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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,838	10/16/2006	Peter J. Smith	19339-102165	4275
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CLARK HILL, P.C. 500 WOODWARD AVENUE, SUITE 3500 DETROIT, MI 48226				
EXAMINER				
STRIMBU, GREGORY J				
ART UNIT		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/541,838

Applicant(s)

SMITH, PETER J.

Examiner

Gregory J. Strimbu

Art Unit

3634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
- Paper No(s)/Mail Date 7/12/05
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Information Disclosure Statement

The information disclosure statement filed July 12, 2005 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the Great Britain Patent No. 512,273 referred to therein has not been considered.

Specification

The disclosure is objected to because of the following informalities: "cross-sectional" on line 1 of paragraph 16 is confusing since figure 2B does not show a cross sectional view; it appears that "170A" and "170B" on line 15 of paragraph 33 should be changed to --140A-- and --140B-- respectively; it appears that "248" on line 15 of paragraph 35 should be changed to --252--

Appropriate correction is required.

Claim Rejections - 35 USC § 112

Claims 1, 6, 11-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Recitations such as "the rail presenting said first end" on line 12 of claim 1 renders the claims indefinite because they are grammatically awkward and confusing.

How does a rail "present" an end? Additionally, the recitation is confusing since the applicant has set forth only one rail above. Thus, attempting to identify the rail as the rail presenting the first end appears to be unnecessary. Recitations such as "a cable" on line 2 of claim 6 render the claims indefinite because it is unclear if the applicant is referring to the cable set forth above or is attempting to set forth another cable in addition to the one set forth above. Recitations such as "first and second guide pulleys . . . second rails" on lines 6-7 of claim 11 render the claims indefinite because it is unclear how a first pulley can be mounted near both the first and second rails. Recitations such as "and by additional means" on line 17 of claim 11 render the claims indefinite because they are grammatically awkward and confusing. Recitations such as "said first rail end" on lines 20-21 of claim 11 render the claims indefinite because it is unclear to which one of the plurality of first rail ends set forth above the applicant is referring.

Double Patenting

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claim 1 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,796,085. Although

the conflicting claims are not identical, they are not patentably distinct from each other because the differences are merely semantic. For example, claim 1 of the instant application recites a drive means while claim 1 of 6,796,085 recites a crank assembly. Clearly, a crank assembly comprises a drive means.

Claims 2-10 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-12 of U.S. Patent No. 6,796,085 in view of Morando (US 6161337). Claims 1-12 of 6,796,085 set forth the applicant's invention but for a cable guiding drum.

However, Morando discloses a cable guiding drum 36.

It would have been obvious to one of ordinary skill in the art to provide claims 2-10 of 6,796,085 with a cable guiding drum, as taught by Morando, to more efficiently drive the cable to raise and lower the window pane.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morando (US 6161337) in view of Ward (US 5309679). Morando discloses a window regulator comprising two rails 21, 22; a lift plate 30, 31 slidably mounted on each rail; at least one cable 35B; a first guide pulley 23 mounted near a first end of said rail 21; a second

guide pulley 23 mounted near a second end of said rail 21; and drive means for translating the at least one cable; whereby actuation of the drive means in a first sense tensions said at least one cable to move each lift plate towards a first rail end, and actuation of the drive means in a second sense, opposite said first sense, tensions said at least one cable to move each lift plate towards a second rail end. Morando is silent concerning lift pulleys mounted to the lift plate.

However, Ward, in figure 4, discloses a window regulator assembly comprising a drive means for translating at least one cable 216; characterized by lift pulleys 50a, 50b mounted to a lift plate, and in that said least one cable has a first end anchored at 52a and wound about the lift pulley 50a and thence routed about a first guide (not numbered, but shown in figure 4 at 20a), and a second end anchored at 52b and wound about the lift pulley 50b and thence routed about the second guide (not numbered, but shown in figure 4 at 24b).

It would have been obvious to one of ordinary skill in the art to provide Morando with a lift pulley, as taught by Ward, mounted on each lift plate to double the amount of lifting force applied to the window.

Claims 2 and 4-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Price (US 1457316) in view of Beyerlein (US 5528861). Price discloses a window regulator assembly comprising:

- a lift plate M;
- at least one cable R;

first and second guide pulleys O, L'; and

a rotatable cable guiding drum J;

characterized by a lift pulley N mounted to the lift plate; and in that the at least one cable has a first end anchored at P and wound about the lift pulley N and thence routed about the first guide pulley O to operatively engage the drum J, and a second end anchored at S and wound about a lift pulley N' and thence routed about the second guide pulley L' to operatively engage the drum J,

whereby operative movement of the drum in a first sense tensions the at least one cable to move the lift plate in a first direction, and operative movement of the drum in a second sense, opposite said first sense, tensions the at least one cable to move the lift plate in a second direction;

wherein said lift pulleys N, N' are rotatably mounted to said lift plate (claim 4);

the lift pulleys N, N' have at least two independent guides, each for guiding the cable along a generally U-shaped route (claim 6);

tension means S (claim 8);

a crank U (claim 9).

Price is silent concerning a rail and a single lift pulley.

However, Beyerlein discloses a window regulator assembly comprising a rail 2, a lift plate 3 mounted to slide along the rail; first and second guide pulleys (not numbered, but shown in figure 1) respectively rotatably mounted near first and second ends of the rail, and a rail guide (not numbered, but shown in figure 5).

It would have been obvious to one of ordinary skill in the art to provide Price with a lift plate, as taught by Beyerlein, to better guide the window as it moves between the opened and closed positions.

Additionally, it would have been obvious to one of ordinary skill in the art to make the lift pulleys N and N' as a single lift pulley since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893).

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Price (US 1457316) in view of Beyerlein (US 5528861) as applied to claims 2 and 4-9 above. Price, as modified above, is silent concerning two cables.

However, it would have been obvious to one of ordinary skill in the art to provide Price, as modified above, with two cables since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlichman*, 168 USPQ 177, 179.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Price (US 1457316) in view of Beyerlein (US 5528861) as applied to claims 2 and 4-9 above. Price, as modified above, is silent concerning additional guide pulleys.

However, it would have been obvious to one of ordinary skill in the art to provide Price, as modified above, with additional guide pulleys since it has been held that the

mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Claims 11, 12, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morando in view of Ward. Morando discloses a window regulator assembly comprising:

first and second rails 21, 22;

first and second lift plates 30, 31 respectively slidably mounted to the first and second rails;

at least one cable 35B;

first and second guide pulleys 23 respectively mounted near first and second ends of the first and second rails;

a drum 36;

additional means 35A for interconnecting the first and second lift plates,

whereby operative movement of the drum in a first sense tensions said at least one cable to move the first and second lift plates towards a first rail end, and operative movement of the drum in a second sense, opposite said first sense, tensions said at least one cable to move each lift plate towards a second rail end;

wherein said interconnecting means is a cable 35A routed around third and fourth guide pulleys 23 respectively mounted to the first and second rails (claim 12);

wherein said first and second guide pulleys 23 are rotatably mounted to said first and second rails (claim 15).

Morando is silent concerning lift pulleys.

However, Ward, in figure 4, discloses a window regulator assembly comprising first and second lift pulleys 50a, 50b respectively mounted to the a lift plate (not numbered, but shown in figure 4 at the bottom of the window glass); and wherein said least one cable has a first end anchored at 52a and wound about the first lift pulley 50a and thence routed about a first guide (not numbered, but shown at 20a) to operatively engage the drum (not shown, but see column 2, line 37) and a second end anchored at 52b and wound about the second lift pulley 50b and thence routed about a second guide (not numbered, but shown at 24b) to operatively engage the drum;

wherein said lift pulleys 50a, 50b are rotatably mounted to said lift plate (claim 14).

It would have been obvious to one of ordinary skill in the art to provide Morando with lift pulleys, as taught by Ward, to double the amount of lifting force applied to the window.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morando in view of Ward, as applied to claims 11, 12, 14 and 15 above. Morando, as modified above, is silent concerning the cable 35B comprising two cables.

However, it would have been obvious to one of ordinary skill in the art to make the cable 35B of Morando, as modified above, as two cables since it has been held that the mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Russell (US 3022064) in view of Price. Russell discloses a window regulator assembly comprising:

a rail 14,

a lift plate 74 mounted to slide along the rail;

at least one cable 68; and

first and second guide pulleys 56, 60 respectively mounted near first and second ends of the rail;

the at least one cable 68 extending linearly between the first and second guide pulleys; and

wherein at least one of the first and second guide pulleys 56 is connected to a means 28 for rotating the pulley and includes a multi-turn cable guide (as shown in figure 5) for winding and unwinding the at least one cable, whereby rotation of the drive pulley in a first sense tensions the at least one cable to move the lift plate towards the first end of the rail, and operative movement of the drive pulley in a second sense, opposite said first sense, tensions the at least one cable to move the lift plate towards the second end of the rail. Russell is silent concerning a lift pulley.

However, Price discloses a lift pulley N mounted to a lift plate M and at least one cable R having a first end anchored at P and wound about the lift pulley N and thence routed about a first guide pulley O, a second end anchored at S and wound about the lift pulley N' and thence routed about the second guide pulley L'.

It would have been obvious to one of ordinary skill in the art to provide Russell with lift pulleys, as taught by Price, to increase the amount of lifting force generated by the cable.

Additionally, it would have been obvious to one of ordinary skill in the art to make the pulleys N and N' as a single pulley since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlichman*, 168 USPQ 177, 179.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory J. Strimbu whose telephone number is 571-272-6836. The examiner can normally be reached on Monday through Friday 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Katherine Mitchell can be reached on 571-272-7069. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gregory J. Strimbu/
Primary Examiner, Art Unit 3634